# FIELD OPERATIONS OF THE SOIL CONSERVATION SERVICE FOR THE YEAR ENDING JUNE 30, 1936.

A radio talk by T. B. Chambers, chief engineer, Soil Conservation Service, delivered during the Department of Agriculture period of the National Farm and Home Hour, Friday, August 7, 1936, and broadcast by NBC and a network of associated radio stations.

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Before I tell you something of the work of the Soil Conservation Service during the past year, let me explain briefly the nation-wide program that is designed to save the remaining areas of our most basic resources -- our good agricultural land which is now subjected to enormous annual wastage by uncontrolled erosion.

The Soil Conservation Service is attempting to spread the use of soil-saving practices throughout the country by the demonstration of practical and effective measures of erosion control through actual work on the land. At the same time, it is constantly searching for new and better methods of control through research on experiment stations located on typical farm and grazing land in various parts of the country.

Representative areas have been selected in distinctive agricultural regions, where demonstration work is conducted in accordance with the specific needs of the different kinds of land. These areas range in size from about 25,000 to 100,000 acres each, and their purpose is to show farmers how certain practices will help to hold valuable soil on the land where it belongs. This soil maintenance can be accomplished only by reducing the excessive loss of rainwater and causing it to sink into the ground, for it is the rapid runoff of rainwater that strips away the precious topsoil. An incidental, but highly important effect of this type of work is the reduction of water in streams, thus lessening, in some degree, the hazard of floods.

All work is carried on in close cooperation with landowners and farm operators; and with such state agencies as the Extension Service, the Experiment Stations and the colleges of agriculture. All but a few of the areas are on privately-owned land.

One year ago the Soil Conservation Service was conducting 44 demonstration projects on private land, and 3 on Federally-owned land. On July 1, of this year the number of private land had grown to 142, and on Federal land to 5; making a total of 147 demonstration and work areas. During this period, the number of cooperating farmers increased to 17,000, with the list growing larger each week. These cooperating farmers operate about 2,500,000 acres, not including the grazing areas of the western, Federally-owned land. Thus, you can see that the area involved represents an important segment of the agricultural land in the country.

A tremendous amount of work has been accomplished on this vast area. Thousands of acres have been protected by terracing, hundreds of thousands of trees have been planted in gullies and on hillsides to conserve soil and water. Strip cropping, contour cultivation, crop rotations and cover crops have likewise been introduced on hundreds of thousands of acres in demonstration areas, and each phase of the erosion control program has made substantial progress.

This program makes use of all practical measures of control and prevention that we know about. Fences had to be moved in order to cultivate across slopes, rather than up and down them. Steep, highly erodible land was retired from cultivation and planted to trees or permanent grass. Thousands and thousands of little dams were built to check gullies; and not a few dams of large size were thrown across great chasms, which were eating away at whole farmsteads. Some of the demonstration projects used from 25 to 30 different methods of land treatment and utilization.

A very important feature of the demonstration work is directed toward the spread of land conservation measures throughout the millions of acres of eroding land in the United States. The progress of the program during the past year, therefore, must be measured in no small degree by the effect which these practica land-saving efforts have had on agricultural thought and action.

I believe I can say that the program of the Soil Conservation Service has been a highly important factor in awakening American farmers to a fuller realization of the absolute necessity for conserving our remaining areas of good agricultural land. During the year a marked development of interest, not only on the part of farmers, but also on the part of business men and others only remotely connected with the land, was apparent. The attention of the Nation, which had been awakened to the serious problem of soil erosion by spectacular midwestern dust storms in previous years, was crystallized during the past year into a profound belief and determination that a complete and thorough-going attack should and would be made against this greatest enemy of the land - soil erosion. Thus, the value of actual physical treatment of the land within the demonstration areas must not be measured solely by the extent of the work accomplished, but also by the service it performs in convincing farmers that erosion can be controlled through careful use of the land and the application of adaptable measures of erosion prevention and control.

It has been impossible to maintain an accurate record of the number of farmers and other interested persons who inspected erosion-control work on the 14 demonstration areas of the Soil Conservation Service during the year, but a conservative estimate would place the number at about 1,000,000. If each of these persons represented only 50 acres of land needing protection from erosion, the demonstrations might logically be said to have extended some measure of influence during the year to at least 50,000,000 acres of land outside of the demonstration areas.

Aside from this healthy influence, the Service believes that it may claim tangible results for the work actually performed within its demonstration areas. Let me give you one or two examples which are indicative of the progress of the entire program. On June 30, 1935, after almost two years of work, approximately 175,000 acres of land in demonstration areas had been strip cropped. On June 30, 1936, the area in strip cropping had grown to more than 283,000 acres, or an increase of more than 107,000 acres within a year. In like manner, terrace construction increased greatly, or from approximately 10,000 miles to more than 20,000 miles. During the year ending June 30, about 17,500 acres of trees were planted, bringing the total planting for the Soil Conservation Service to more than 33,000 acres.

In this connection, I want to mention briefly the extremely valuable work of the CCC camps in erosion control. During the past year approximately 450 camps have been engaged in soil conservation activities, each on an area ranging from 18,000 to 25,000 acres or more. These camp areas have been, in effect, additional demonstration areas. Within the past year almost 170,000 acres of farm land was strip cropped in the camp areas. More than 19,500 miles of terrace was constructed by farmers in camp areas and approximately 47,500 acres of trees were planted for erosion control purposes. The value of this work will be felt for years to come.

But returning to the regular projects, I want to emphasize again the progress made in the demonstration of erosion control methods. These methods, utilized in a practical manner on cooperators' farms, have been so convincing that they are now being applied by a substantial number of land owners on their own lands, outside the demonstration areas. This is a very real part of the progress of the Soil Conservation Service during the past year and indicates what we may expect in even greater degree in the years to come.

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